

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 34 (Cancelled)

Claim 35 (New) A method of identifying an objective road, indicated by location information transmitted from a transmitting side, on a digital map on a receiving side, the method comprising the steps of:

receiving the location information indicative the objective road from the transmitted side; and

identifying the objective road on the digital map by executing matching the location information with road network data which are included in the digital map and hierarchized to multi layers such that most upper-grade hierarchical layer represents most important road network.

Claim 36 (New) The method according to claim 35, wherein the receiving side starts executing the matching using the road network of the most upper-grade hierarchical layer.

Claim 37 (New) The method according to claim 36, wherein when the receiving side cannot identify the objective road on the digital map by executing matching using the road network of the most upper-grade hierarchical layer, the receiving side executes the matching using road network of one-lowered-grade hierarchical layer.

Claim 38 (New) The method according to claim 35, wherein the road network of each hierarchical layer includes an interlayer linking node used to be transferred from the road network of an upper-grade hierarchical layer to another road network of a one-lowered-grade hierarchical layer.

Claim 39 (New) A receiving device comprising:
a digital map which includes road network data which are hierarchized to multi layers such that most upper-grade hierarchical layer represents most important road network;
a data receiving unit for receiving location information indicative of an objective road; and
a map matching unit for identifying the objective road on the digital map by executing matching the location information with the hierarchized road network data.

Claim 40 (New) The receiving device according to claim 39, wherein the map matching unit starts executing the matching using the road network of the most-upper-grade hierarchical layer.

Claim 41 (New) The method according to claim 40, wherein when the map matching unit cannot identify the objective road on the digital map by executing matching using the road network of the most upper-grade hierarchical layer, the map matching unit executes the matching using road network of one-lowered-grade hierarchical layer.

Claim 42 (New) The receiving device according to claim 39, wherein the road network of each hierarchical layer includes an interlayer linking node used to be transferred from the road network of an upper-grade hierarchical layer to the road network of one-lower-grade hierarchical layer.